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DIV. 15

General Directions for Setting Up SYMONS WALL FORMS

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The Corner

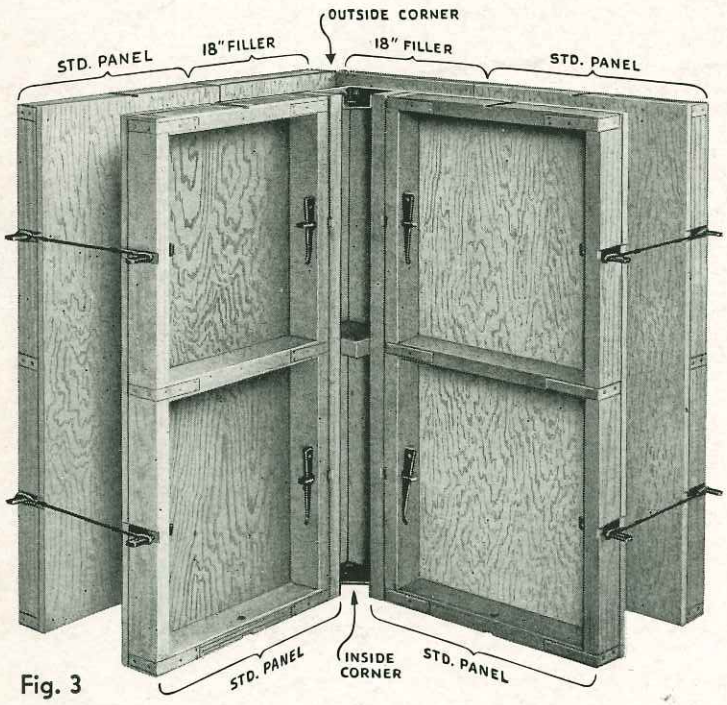

Fig. 3

All corners require inside and outside corner pieces, Figs. 1 and 2. The inside corner piece is 8" wide each way. Hence, the dimension to be filled in on opposite side is always the wall thickness, plus 8".

In setting up the inside corner, you first attach 2 standard panels to the inside corner piece, Fig. 1, passing the connecting bolts through the loops in the ties. Next, you put up the outside corner as per photo below.

In Fig. 4, the wall thickness is 10". Accordingly, an 18" filler is required on each side of the outside corner piece, Fig. 2. If you do not have 18" fillers, you may use a 16" plus a 2" on one side, or a 14" plus a 2" on each side, or any combination of fillers that will make the 18" width. Otherwise, make fillers as per Fig. 5.

Having set these fillers in place, the panels on both sides of the wall now match with each other and you proceed toward the center. The waler ties, if a waler is to be installed, are slipped over the connecting bolts as the bolts are put in place. However, the waler is not put up until one side of wall is erected.

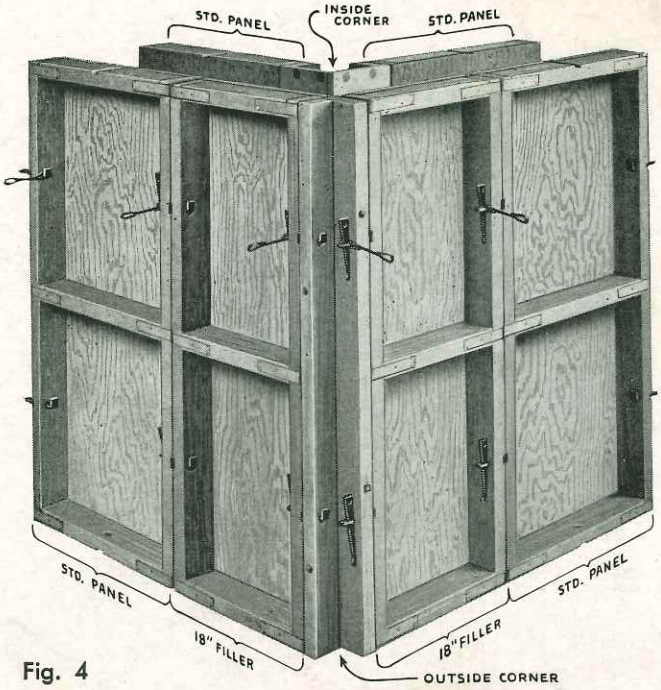

Fig. 4

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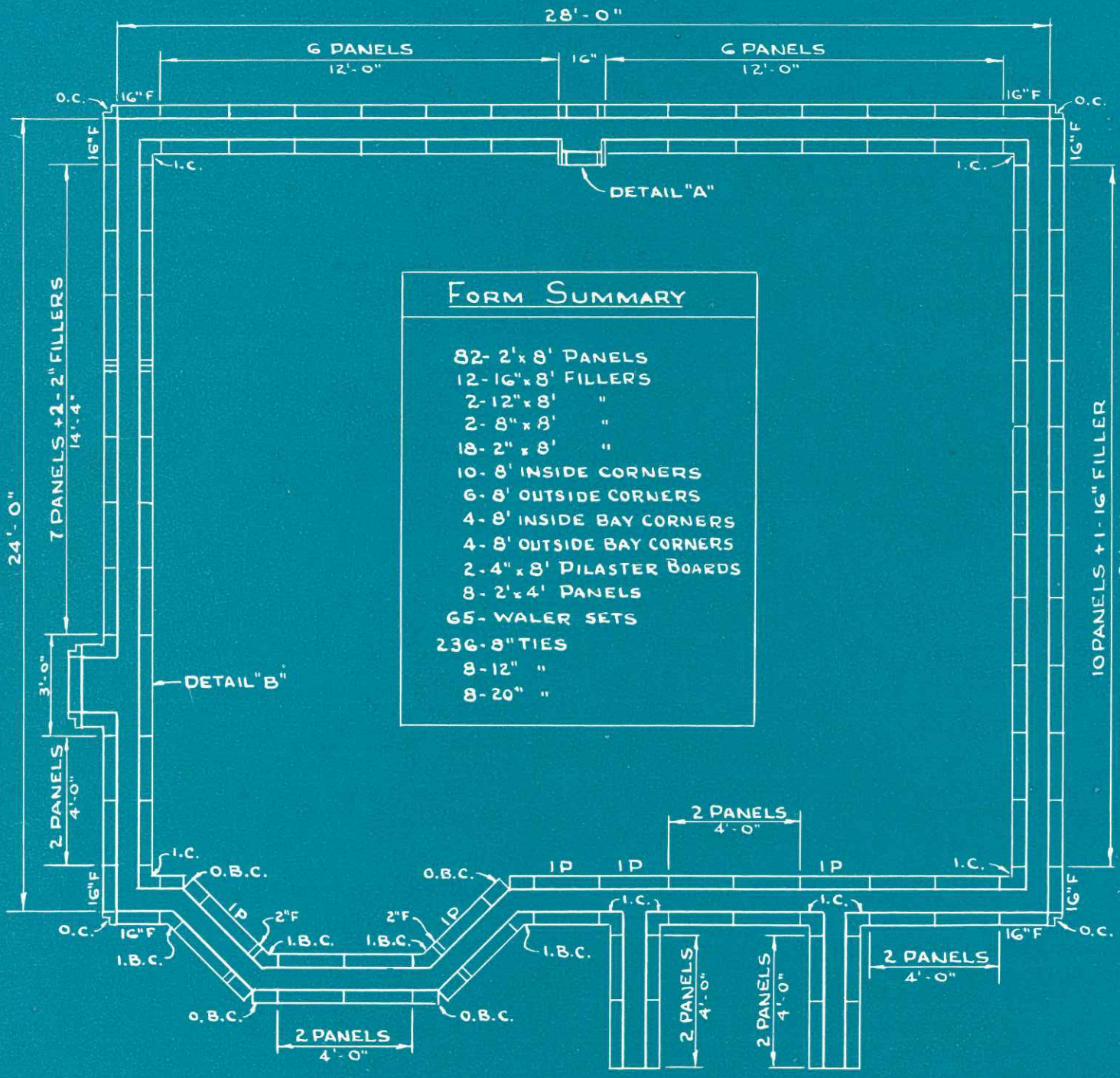
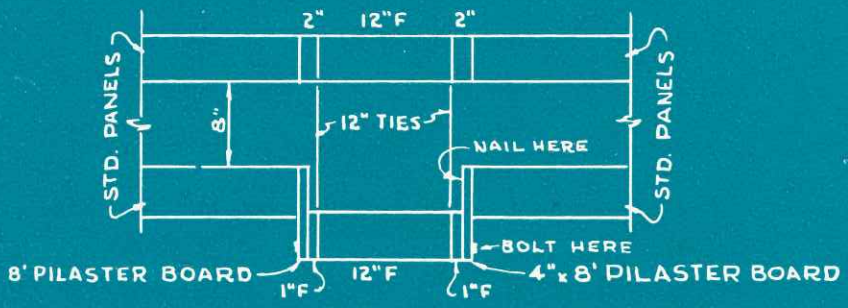


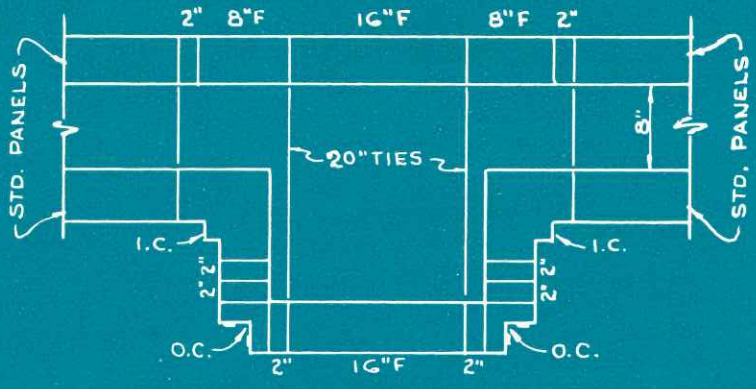
Form Summary

82- 2'x 8' Panels
12- 16"x 8' Fillers
2- 12"x 8' "
2- 8"x 8' "
18- 2"x 8' "
10- 8' inside corners
6- 8' outside corners
4- 8' inside bay corners
4- 8' outside bay corners
2- 4"x 8' Pilaster Boards
8- 2'x 4' Panels
65- waler sets
236- 8" ties
8- 12" "
8- 20" "



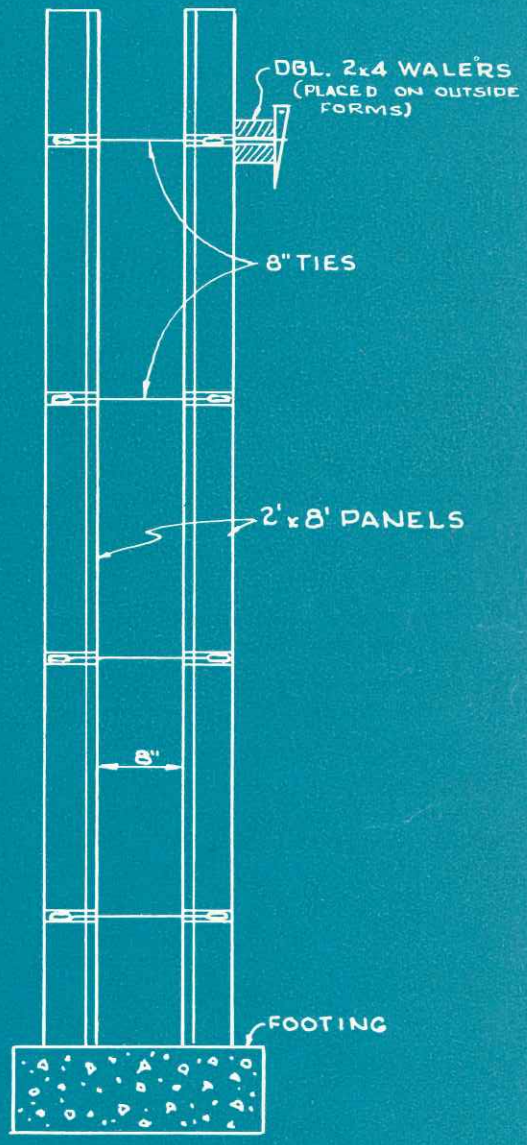
DETAIL "A"

FOR PILASTERS THAT PROJECT LESS THAN 8" FROM WALL SURFACE.



DETAIL "B"

FOR PILASTERS THAT PROJECT MORE THAN 8" FROM WALL SURFACE.



SECTION THRU WALL

YOUR JOB WILL REQUIRE THE FOLLOWING HARDWARE PER PANEL:

PANEL SIZE	SHORT CONNECTING BOLTS	TIGHTENING WEDGES	U TIE HOLDERS	S TIE HOLDERS
2' x 4'	2	2	0	0
2' x 6'	3	3	0	0
2' x 8'	4	4	0	0
4' x 4'	4	2	1	1
4' x 6'	6	3	2	1
4' x 8'	8	4	3	1

All fillers and the corner panel require the same accessories as panels in the 2' width. All the above accessories are included in the price of the panels and are shipped with the panels without specifications.

In addition to the above, you will need long connecting bolts whenever 1" and 2" fillers are used, this for the reason that these bolts go all the way through these fillers and connect adjoining panels. You need two of these long bolts for every 2' in length of these fillers that you use.

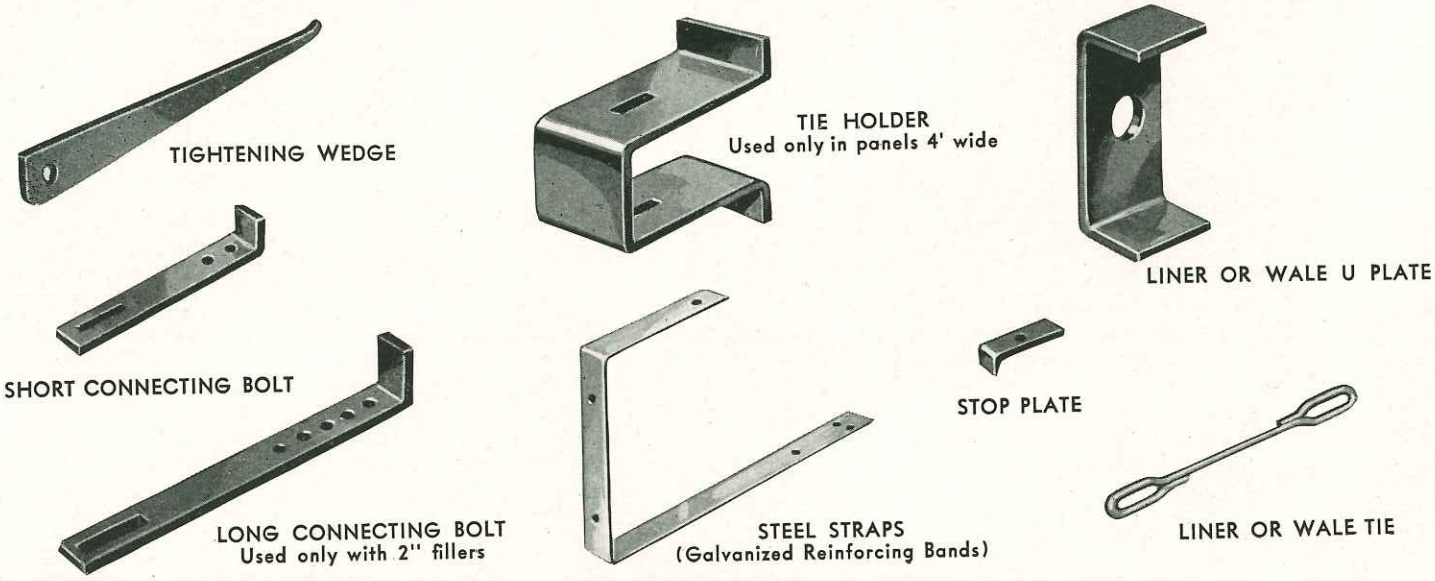
As to the ties, you need one tie for every four square feet of wall, that is to say, for a wall 8' high and 20' long, you will require forty ties. As to the Liner or Waler Ties you will need one of these for every 2' in length of wale. You use the same number of Wale U Plates.

Before proceeding, determine from layout just what is required in the way of panels, fillers, corner pieces and hardware. Make sure that every part needed is on the job. This is very important and will save delays, speed the job, and lower the cost.

1. Oil the surfaces of all panels and fillers—any thin oil.
2. Erect corner panels as per instructions on Page 1. Plumb and brace. From the corners, work toward the center with one side of the wall forms.
3. In case you do not have a layout, it is easy in a stretch of wall to determine what fillers are required. This is ascertained by first subtracting for inside corner pieces, Fig. 1, Page 6, plus wall thickness for the outside forms, then divide the length of the stretch by 2 which gives the number of standard panels 2' wide; the balance represents the space to be filled in by fillers. If you do not have the correct size fillers, insert 1" and 2" fillers, (which may be made on the job). The 1" filler is made by ripping 4⅜" off a 1" board. The 2" filler is made by ripping 4⅜" off a 2" board, or by adding a 1" strip to a piece of 2 x 4.
4. Where walers are used for alignment only, one near top of one side is usually all that is needed. The waler tie is slipped over the connecting bolt before inserting wedge. The wales are put on after one side is erected.
5. After reinforcing steel has been placed, and frames, boxes, inserts, sleeves, etc., have been installed to the one face of the wall forms, erect the opposite face of the wall.
6. On preceding page, we show two methods for making pilaster.

IMPORTANT—Do not throw panels out of alignment by driving wedge through connecting bolt too tight—leave loose.
To break back ties, insert one of the wedges or a connecting bolt through the loop end, give half turn; the tie will snap at point of greatest resistance which is at beginning of flat spot, 1" back from face of wall—do not break back ties until concrete is fully set.

HARDWARE FOR SYMONS FORM PANELS



The Pilaster — Two Methods of Construction

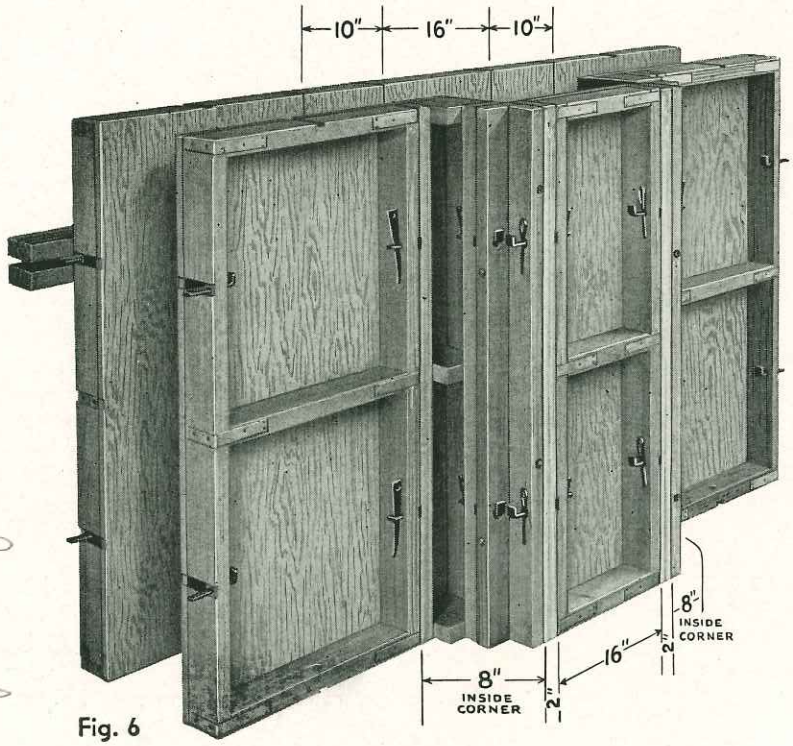


Fig. 6

Fig. 6 shows pilaster 20" wide and projecting from wall surface 8"—there were used 2 inside corner pieces and 2 outside corner pieces, Figs. 1 and 2. The inside corner pieces make the depth 8". For the width 20", there were used two 2" fillers and one 16" filler.

In the wall opposite these parts, there were used two 10" fillers and one 16" filler. The 16" filler matches with the 16" filler in the projecting part, and the 10" fillers match with the inside 8" corner pieces plus the 2" fillers.

For variation in width, you would, of course, use different size fillers.

If pilaster projects more than 8", insert fillers of suitable widths.

If pilaster projects less than 8", use construction as in Fig. 7.

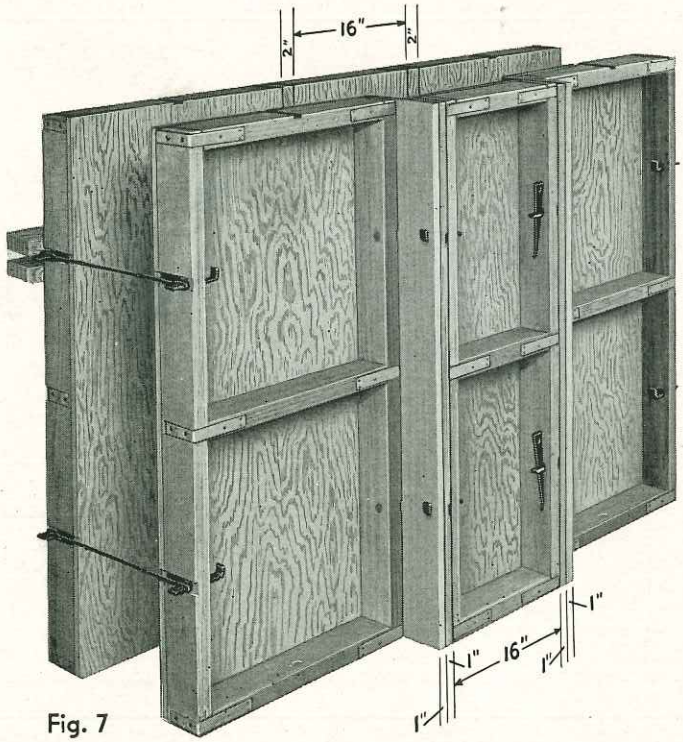


Fig. 7

Fig. 7 shows construction of pilaster that projects from the wall less than 8" and is 18" wide. (You cannot use the inside corner pieces, as they are 8" each way.) In place, you use 1" boards which we designate as pilaster boards. These boards are in width $4\frac{1}{2}$" plus the amount of the projection. They are nailed to the adjacent wall panels and are secured to the 1" and 16" fillers by connecting bolts that pass through all three, as shown in photo.

In the wall opposite, a 16" filler is used with a 2" filler on each side. These 2" fillers match up with the 1" fillers plus the pilaster boards, and the 16" filler matches up with the 16" filler in the projection as shown in photo.

In ordering ties for the pilaster, give wall thickness plus the amount of projection. The ties are placed between the 16" and 1" fillers which leaves the ties imbedded in concrete 1" from the sides of the pilaster.

Fig. 1
8" x 8" Inside corner

NO WAITING AROUND FOR FILLERS.
EASILY AND QUICKLY MADE ON THE JOB.

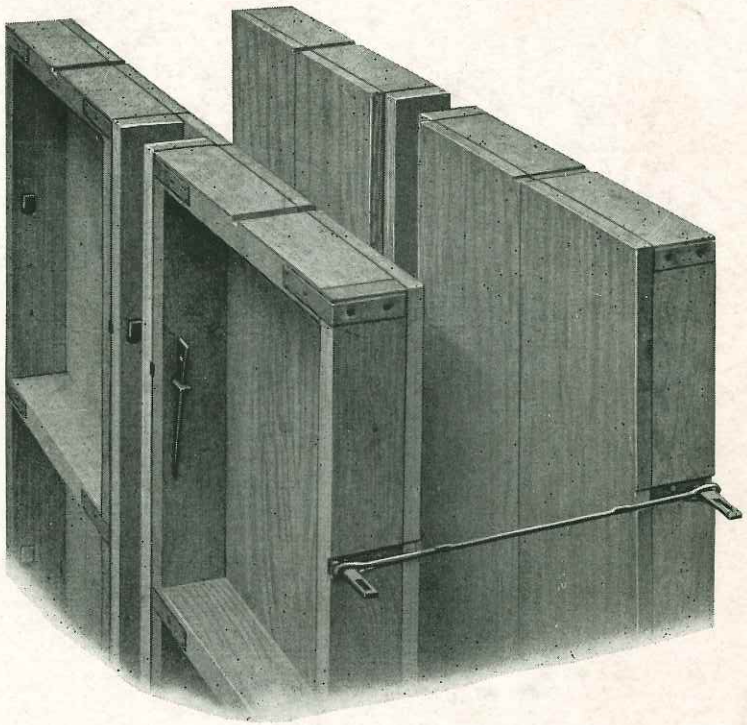


Fig. 5

Fig. 2
Outside corner

1" fillers are made from 1" boards cut 4 3/8" wide. 2" fillers are made from 2" boards cut 4 3/8" wide. Wider fillers can be made as shown in Fig. 5—Take 2 pieces of 2 x 4's, bore holes to correspond with connecting bolt holes in panel forms. When set in place, there are provided ledges or shoulders to which are nailed a 3/4" piece of plywood, or a 1" board of proper width.